



# MISSOURI VETERINARY EMERGENCY AWARENESS MANUAL





## Introduction

The Missouri Veterinary Medical Association (MVMA), Missouri Department of Agriculture (MDA), and Missouri Department of Health and Senior Services (DHSS) are working collaboratively to develop the Missouri Veterinary Emergency Awareness Program. This is a training and information-sharing program for veterinarians that will allow them to respond to outbreaks of animal disease that might originate through natural means or by an act of bioterrorism. The program utilizes multiple methods of communication, including videoconferencing to regional sites across the state, personal presentations at MVMA district meetings, newsletter articles, direct mailings to veterinarians, and material made available on the World Wide Web.

The impetus for this training is the growing threat to animal and human health presented by emerging/re-emerging infectious diseases as well as by the threat of a bioterrorist act. The risk of disease introduction into populations of companion animals, livestock, and poultry has increased dramatically as the global movement of animals and people has accelerated. The impact of the introduction of disease into these populations could be catastrophic. For example, the occurrence of foot-and-mouth disease in the United States would have enormous economic ramifications and its effect on the cattle industry would involve a long period of recovery. Even if a foreign animal disease that might be introduced into our country could be eradicated, it would most likely be at a very high cost. The outbreak of exotic Newcastle disease in Southern California in 2003 was successfully controlled, but only because of early detection and extremely intensive investigation and follow-up.

It is estimated that 75 percent of the emerging/re-emerging pathogens are zoonotic. Therefore, the public health impact of these diseases must always be considered. In some instances, sick animals may serve as a source of infection for humans. At

other times, both animals and humans might fall ill from a common environmental exposure. The detection of illness in animals may be used as a “sentinel” event, presenting a warning of possible impending human cases that could be prevented or minimized through implementation of effective intervention measures. This situation would have the highest likelihood of occurring in an urban area in which there are higher concentrations of people, companion animals, and veterinarians.

In addition to the spread of disease by natural mechanisms, the possibility of introduction of infectious disease by terrorist activity must also be considered. This problem is compounded by the fact that many potential agents of bioterrorism (e.g., anthrax, tularemia, plague) also occur naturally. This necessitates the rapid reporting and investigation of these cases (in animals and humans), so that naturally occurring cases can be differentiated from those caused by an act of bioterrorism. Since almost 80 percent of the Category A and B bioterrorist agents are zoonotic, investigations of animal and human cases of these diseases will often be closely linked to each other.

The purpose of this manual is to provide veterinarians with condensed reference material regarding the major high consequence livestock pathogens and potential agents of bioterrorism. It is not intended to be comprehensive either in the number of diseases included in the manual or in its treatment of individual diseases. The manual consists primarily of fact sheets derived from the Iowa State University Center for Food Security and Public Health (CFSPH), which is a Centers for Disease Control and Prevention (CDC) Center for Public Health Preparedness. The CFSPH is CDC's only Center for Public Health Preparedness that focuses on veterinary medicine and zoonotic diseases.

#### Additional materials in the manual include:

- Listing of individuals and agencies at the state and federal levels, along with contact information, who should be contacted in the event of an animal and/or public health emergency.
- Emergency response protocol for reporting foreign animal diseases.
- Listing of reportable diseases.
- Summary of general signs of reportable diseases in animals and poultry.
- Recommendations regarding biosecurity measures, methods for protecting livestock operations, and use of disinfectants.
- Reference chart to distinguish exotic Newcastle disease from highly pathogenic avian influenza.
- Reference chart to distinguish various vesicular diseases.
- Photographs to help in the diagnosis and differentiation of various infectious diseases, particularly vesicular diseases.

Recommendations and comments pertaining to the content of this manual may be addressed to representatives from the MVMA, MDA, and DHSS. Telephone numbers for these individuals are given in the emergency contact listing included with this manual.

The use of trade names in this manual is for the information of the reader. Such use does not constitute an official endorsement or approval by the MVMA, MDA, or DHSS.

#### Acknowledgement

Photographs of animal diseases in this manual are provided by the United States Animal Health Association, 1610 Forest Avenue, Richmond, Virginia 23288. The participation of the USAHA is gratefully acknowledged. Other information on foreign animal and zoonotic diseases is available on the web at [www.usaha.org](http://www.usaha.org).

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To report a public health emergency, call 1-800-392-0272.  
This toll-free number is staffed 24 hours a day, seven days a week.

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Hearing and speech impaired citizens telephone 1-800-735-2966.

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